

CLAIMS

1. A bottom removal-type paper supply apparatus having a force applying means which presses paper stacked on a paper support base, a first pickup roller which is provided at an end portion of the paper support base on the side toward the body of an apparatus and which picks paper stacked on the paper support base from the bottom and transports it into the apparatus, and a second pickup roller which is provided at a central portion of the paper support base and which assists the first pickup roller and transports stacked paper into the apparatus, characterized in that

a shutter which can be switched between an open state in which the stacked paper can come into contact with the second pickup roller and a closed state in which the shutter prevents the contact is provided on the second pickup roller, and

the paper supply apparatus is configured to open the shutter so as to utilize the paper transport force of the second pickup roller only when more than a prescribed weight or a prescribed number of sheets of paper are stacked on the paper support base.

2. A bottom removal-type paper supply apparatus as set forth in claim 1 wherein the pressure applied to paper by the pressure applying means can be adjusted.

3. A bottom removal-type paper supply apparatus as set forth in claim 1 wherein opening and closing of the shutter is carried out by sensing the weight of paper stacked on the paper support base and controlling the shutter so as to open the shutter when the stacked paper is at least a prescribed weight and close the shutter when the weight of paper is less than or equal to the prescribed weight.

4. A bottom removal-type paper supply apparatus as set forth in claim 1 wherein opening and closing of the shutter is carried out by sensing a pickup miss by the first pickup roller and controlling the shutter so as to open the shutter when a pickup miss has occurred and close the shutter when paper has been fed into the apparatus.